

Creedon Controls, Inc.
 Bank One Core Data Center #2
 Critical Event Summary Change Orders
 CCI Project #2357

Events from Beginning of CCI's Work through 4/7/04

Drawing	Sequence	Item No.	Description	Reference	Delay Type	Shift	General Foreman Hour	Foreman Total Hours	Foreman Total \$	J Journeyman Hours	J Journeyman Total \$	A Apprentice Hours	A Apprentice Total \$	Direct Expenses	PCO	Total \$				
	75		Submittals and RFIs were not timely returned and frequently caused confusion. The engineer and the architect were not simultaneously copied, which delayed approvals. Things we thought were approved were not. This problem continued from October 2003 through April 2004.		RTI/ Submittal Impact	D	0.0	0	0	0	0	0	0	0	0	0				
	76		Roughed in conduits left because walls were not finished, were color coded so we would know what and where they were. These get painted black when painter did the ceiling areas. This problem extended from January through May 2004.			D	1.6	97	8.0	465	40.0	2,113	0	0	2,675					
	77		75 motorized dampers had the locations changed throughout the job. Could not pipe in early without locations to pipe to. Still have no locations for some. More difficult to pipe to now. This problem extended from January through July 2004; the only way we could get this resolved was through L.D. Griffith.			D	12.0	729	60.0	3,486	300.0	15,846	37.5	1,535	21,626					
	78		General clean-up - pre-Christmas. As-builts, material and job logs were thrown away by laborers. This occurred December 2003 and required hiring a consultant to recreate the drawing doing a complete review of the installation and documenting the results.			D&N	67.8	316	4.0	232	20.0	1,162	0	0	1,710					
	79		Confusion created by the use of different drawing and area letters. This confusion caused problems from October 2003 through November, when the problems was identified by Creedon and adjustments were made to check and correct the information when area designations were given.			D	24.0	1,458	24.0	1,394	0	0	0	0	2,852					
						Totals					797.0	\$48,400	3282.1	\$191,161	14820.2	\$794,489	3,690.7	\$149,932	10,222	\$1,194,204
	General	2357	80 Saturday Premium Cost Only, actual vs. original estimate			D	4,033	15,930			66,207		12,494		98,665					
						Overall Total @ Cost														

Legend:

1. Rates (from 1/20/04)
- General Foreman
Gen. Foreman-2nd shift
Foreman-2nd shift
J Journeyman
J Journeyman-2nd shift
Apprentice
Apprentice-2nd shift
Laborer
2. Sequence C -> C Dwg Start Order
A 1
A 2
B 3

Note: This calculation includes only the items that could be specifically documented in detail other impacts and items will be added.

Note: This list of events does not completely reflect the cost and schedule impact associated with events such as:

1. Cost escalation of materials, e.g. copper and steel, purchased later than planned due to information and schedule delays.
2. Schedule related cost increases related to labor scheduling
3. Cost and schedule impact related to the timing and completeness of RFIs and submittal responses
4. Cost and schedule impact related to the number, timing, definition and magnitude of change orders
5. Stacking of trades in spaces with limited area, access or space availability

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B-0736

EXHIBIT “B”

B-0737

Creedon Controls, Inc.
 Bank One Core Data Center #2
 Critical Event Summary Change Orders
 CCI Project #2357

March 31, 2005

Events from 4/8/04 through End of CCI's Work

Drawing Sequence	Item No.	Description	Shift	General Foreman		Foreman		J Journeyman		Apprentice		Direct Expenses	PCO	Total \$
				Foreman Hours	Total	Hours	Total \$	Hours	Total \$	Hours	Total \$			
General	1	4/20/04: Closed entrance from Goodwill parking lot to site to start rough grading, contractors willing to do a board walk, but denied this alternative. This added extensive time for manpower to move between trailers and parking areas. No notice was sent.	D											118.85
B	2	6/05/04: Non-compliance was issued from Tishman on moving our equipment from the break room; see response to non-compliance. This was one of the few communications with Tishman through Forest.	D	1.0	60.75	1.0	58.10							
H	3	6/9/04: Asked to have power to the roof top unit in the Administration Building, which Creedon completed as asked, but there were no motor starters, supplied by others, for the Chilled water pumps and the RTU. Cannot run without the chilled water. Deadlift	D											
H	4	6/9/04: Asked to have power to the roof top unit in the Administration Building, which Creedon completed as asked, but there were no motor starters, supplied by others, for the Chilled water pumps and the RTU. Cannot run without the chilled water. Deadlift was an "empty" wheel cart, which they used to dispose of our material and left the cart at the dumpster without even returning it. Had to retrieve material the next day from the	D	0.2	12.15	1.0	58.10	2.0	105.64	0.00	50		225.89	
D	4	6/22/04: Laborers threw out 300 feet of ten foot strut cover in a box, which was on a four wheel cart, which they used to dispose of our material and left the cart at the dumpster without even returning it. Had to retrieve material the next day from the	D	2.0	121.50	1.0	58.10			0.00			178.60	
E	5	7/1/04: Two men lift in the generator room #1A with a Creedon lifter, but was rented by the sprinkler fitter. This resulted in an inappropriate non-conformance notice, responded to by Creedon.	D							4.0	168.92	1.00	1,168.92	
	6	8/18/04: The laborers threw out a skid of conveyance supports we were saving to do additional tray supports as needed. It was trashed with full knowledge by Tishman that a truck would arrive within one hour to store this material off-site.	D											
	6	2/5/04: Admin Bldg rough-in floor boxes required by Tishman and Forest as an extra (T&M?). Furness had to go into the same room at a deeper elevation due to the sweep of elbows. Creedon (7:00 to 3:30) held up for 8 hours.	D											
H	7	2/6/04: Held up in the same areas by Labov Mechanical because they were installing the rough-in for the bathrooms and they were deeper, therefore first, but they kept the ditch open for three days. Tishman and Forest wanted to pour the Admin area and we could not get done. Men had to be relocated frequently. We put as many people as possible on the work when we could to comply with Tishman and Forest's request.	D	0.8	48.60	4.0	232.40	32.0	1,680.24				1,871.24	
H	7	2/6/04: Admin bldg flooded, four inches in the work area below grade, due to failure to install expansion joint between the Admin Bldg and the Main Bldg. We had to move all our material and equipment to the another area, forced move.	D	0.6	36.45	3.0	174.30	24.0	1,287.68				1,478.43	
H	8	2/7/04: Labov will "digging" in the ditch. Scrawed up the layout of 6 to 8 toilets and two sinks, and they could not get it right. Held up from 10:18; 8 men & 1-2; dinner. At 4:30 they left and the men had to be reassigned for the final hour of the day. Final hours was also lost.	D											
H	9	2/11/04: 2" rigid conduit was taken by a contractor and cut for cables to pull wire. Replaced two hours later, plus track them down. Men could not work until conduit was replaced.	D	0.4	24.30	2.0	116.20	16.0	845.12				985.32	
H, F & G	10	2/11/04: Started pouring concrete in the Admin Bldg. We started on 2/5/04. Poured twelve days later. They had us in there long before we should have been because of Furness and Labov, who should have been in there sooner, so that we would not be delayed	D	3.6	218.70	18.0	1,045.00	80.0	4,753.80				6,018.30	
H	11	3/4/04: Carpenters closed down the Admin Bldg. By storing their material and equipment for the whole job, doors, drywall, studs, expansion joints, etc. 80% of the floor area covered through three and one-half months. No reason to have it there, if not to be installed there, otherwise move it. Tishman should have asked others. Told Forest, Wall, Husar, and Len Beck, but no relief. It became an unloading area for large electrical, chargers, etc. by Furness	D	3.6	218.70	18.0	1,045.00	24.0	1,267.68				2,532.18	

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Creedon Controls, Inc.
Bank One Core Data Center #2
Critical Event Summary Change Orders

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Events from 4/8/04 through End of CCI's Wo

Drawing	Sequence	Item No.	Shift	General Foreman Hours	Foreman Total Hours	Total \$	Hours	Total \$	Hours	Total \$	Hours	Apprentice	Direct	PCO	
H	12	3/5/04 & 3/6/04: Admin floor space problem. Furness w/ many UPS batteries, gear and wire reels. Drywall contractors equipment and diamond plate. Told Forest about the delay to our work and Len Beck did nothing and walked away. We were weeks ahead of the Bear job at this point. The Bear job had C-boxes and lay down areas for material storage. All Brandwine trailers were removed from the site in front of the Admin areas and all the material was moved inside. This was the start of the considerably smaller work area and access when the trailers were removed. December 16, 2003.	D	3.6	218.70	18.0	1,045.80	48.0	2,535.36						3,799.46
H	13	3/6/04: Admin area flooded again. Had to move all tools and material to another area. Could not do work. Only place we could work was the back wall of the Admin and this was under four feet of water. Could not work in this area. Roof expansion joint was never done. Tishman had laborers drill holes in the roof box covers to drain area through the electrical underfloor conduit system.	D	0.8	48.60	4.0	232.40	56.0	2,857.92						3,238.92
H	14	3/9/04: Constantly being stopped by other contractors moving material in Admin Area. Area not covered by material and equipment was used as a material and equipment transport highway. There were four other entities to the building that could have been us 3/10/04 to 3/14/04 and for months. Another contractor was in area the whole day unloading material batteries and reels, they were using lifts. They were dangerous, fear of being knocked off ladder. Accident waiting to happen. Still blocked by Furness with electric fork lifts at up to 15 mph.	D	0.4	24.30	2.0	116.20	16.0	845.12						885.62
H	15	3/10/04: Moved all men out of Admin because no floor space area access, except one available. Left two trailer on T&M work of eight men in Admin Area. Six other men relocated. We were not able to store our material in this area even though we were the only ones working in this area and our material needed to be here. Told Len Beck and Bob Alcock and got no results.	D	2.0	121.50	10.0	581.00	60.0	3,169.20						3,871.70
H	16	3/11/04: Moved all men out of Admin because no floor space area access, except one available. Left two trailer on T&M work of eight men in Admin Area. Six other men relocated. We were not able to store our material in this area even though we were the only ones working in this area and our material needed to be here. Told Len Beck and Bob Alcock and got no results.	D	0.4	24.30	2.0	116.20	12.0	633.84						774.34
H	17	3/17/04: 2 men first each. Tishman was moving us around like Tishman frequently does. Tishman refused to sign T&M slip for these frequent moves. Would not give us lay down area like all other trades. They would let us store in one area than moved to another area the next day.	D	0.4	24.30	2.0	116.20	12.0	633.84						774.34
H	18	3/18/04: A master bundle of 3/4" emt 500 feet was stolen. We had to pay 2-1/2 time more for the replacement pipe. John had to pain the pipe and other materials to keep them from being removed. All other trades had a locked area for material but not Creston. Asked frequently for a locked storage area and lay down area to keep material from being removed to no avail.	D	2.0	121.50	4.0	232.40								
General	19	3/20/04: Panels were installed and conduit was not stubbed-up to the panels as specified. Dispute with Tishman and Forest re: proper work by others precedent to our work. Precedent work was not stubbed-up. We were responsible for the panels. Precedent work was not finished for us to do our work. Bob and Len Beck were told, but did not help. Furness would not bring the pipe above the finished floor level, we had to connect to pipe below grade and many pipes damaged and compression fittings had to be used and pipe cut. Troughs had to be installed at the panels because conduits from work of others were not stubbed up so that direct panel entry was possible.	D	2.0	121.50	10.0	581.00	20.0	1,056.40						1,758.90
General	20	3/20/04 to 4/21/04: 19 panels to extend all conduits from 4" above the floor to panels. Layout had to install trough on average 10'x10'x3' some larger some smaller to hit panels straight. Had to cut floor in some cases. Needed to mount unitstat to support conduit and trough including tie into panel legs to floor and studs. In wall not blocked. This was associated GRS to EMT transition fittings.	D	10.8	656.10	54.0	3,137.40	540.0	28,522.80						32,916.30

Events from 4/8/04 through End of CCI's Work										March 31, 2005	
Drawing Sequence	Item No.	Shift	General Foreman		Foreman		Journeyman		Apprentice		PCO
			Hours	Total	Hours	Total \$	Hours	Total \$	Hours	Total \$	
General	21	4/2/04: Had to dig our four inch conduit left barely above the floor level, jack hammer pad and bought a threaded coupling to transition from rigid to emt. This was covered with Len Beck and Bob from Tishman.	D	8.0	464.80	8.0	422.56		100	987.36	
H	22	4/5/04: Another 2000 feet of 3/4 EMT was stolen; reported to Len Beck and Bob Allocca. Bob Allocca was physically picking-up our material and throwing it in the dumpster. Threaten to take pictures and Allocca stopped. Tishman top people were throwing our material away.	D	1.0	60.75	2.0	116.20		1.300	1,476.95	
General	23	4/8/04: Had to install pull lines in feeder conduits to continue our scheduled work.	D	4.0	232.40	8	422.56			854.86	
H	24	4/20/04: Labov cut a strut holding up two sets of pipes into the wall to install their rain drain. The pipes in the pour floated out and T&M was given, but no extension of time on any T&M done by John. So there were extra costs to stay on schedule.	D	2.0	121.50		4	211.28	2.0	83.46	416.24
General	25	4/26/04: As an example, half the crew of eight was on T&M. Could not address all the scope work to maintain the schedule. This was a frequent problem. Also had to move materials again due to Tishman's lack of planning, lack of coordination, and failure to ask for schedule assistance.	D								
F	26	4/29/04: Had to modify the transfer switch to accommodate the 3" pipes not properly laid-out by another contractor. 400 amp transfer switches. Took out 2-1/4" x 5-1/4" Inches, A1/S2B3 D 5/30/04: A1/S2C3, pipes also laid out wrong and the side rail of the ATS had to be taken out. Also had to change all the Siemens 400 Amp panels with the wrong lugs from dual 500's to dual 600's. Took a couple of extra days. Issued T&M, but six men or fourteen on T&M not scope. Needed more scheduled adjustment or additional money.	D								
E	27	5/15/04: Three one inch conduits broken by filters using lifts in Chiller Room A and Chiller Room B. T&M 2 of 6 men not on scope.	D								
E	28	5/20/04: Force march day. Had to move all the material and equipment from Room 213 to Admin building. Two men all day. Never give any advance notice, just showed-up and put the insulator in there to store their material.	D	2.0	121.50		8.0	422.56	8.0	333.84	877.90
B & H	26	7/1/04: Started moving most of the material and equipment stored in the Admin Area, exposing floor boxes for the first time since March 4, 2004. This finally permitted Creation to finish its work in the Admin Area. Not 100% clear, but workable.	D								
H	27	7/8/04: Tom Keene from Tishman threw away material, 1000' Master Bundle of Uistrut was banded it was to be picked up the next day for credit. Jimmy Ray, Superior Electric, saw Tom Keene personally touch some of the material including strut covers on a cart. It was outside both being no one and strut services was to pick up the next day. This was done with no notice. Tom Keene did this after regular hours after Creation left the site. Took three journeys three hours to replace covers and the strut needed for the balance of the job.	D								
D	28	On a strict time schedule and had to retrieve material and scope items quickly. Domitro affect, very costly. Value of strut \$1,380, but got \$220 credit due to open bundle and condition of materials.	D	1.0	60.75		9.0	475.38	1,160	1,696.13	
H	29	7/9/04: Mike Ricca from Forest and Bob Allocca, Tishman made John move out of rooms we were in Area H to other rooms in Area H. With the confusion and the congestion and lack of planning on Tishman's part. We did not get a space and had to constantly move, five times	D	2.0	121.50		8.0	422.56	544.06	422.56	

March 31, 2005

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 CCI Project #2357
 Events from 4/8/04 through End of CCI's Work

Drawing	Sequence	Item No.		Shift			Foreman			J Journeyman			Apprentice			Direct			PCO		
				General	Foraman	Hours	Total	Hours	Total \$	Hours	Total \$	Hours	Total \$	Hours	Total \$	Hours	Total \$	Hours	Total \$		
		30	7/19/04 11:55 laborers were moving our lights and tubes and tables to the dumpster at Bob Altocca's request and assistance. Never asked us to move anything. Called Charlie to put the stds on them. All in B Data Center, on pallets, needed to finish this job. We were directed by Forest and Tishman to put it there and never asked to move it. Superior and Furness were there also, and were not asked to move. Had to stop all contract work to move this stuff with a moving van. Had to stay late. Ten people of ten were off scope work. Job 95% done at this point. Third time this happened in five weeks. Others working in the data center were not disturbed by Tishman in any way. Bob Altocca just back from vacation.			2.0	121.50	6.5	377.65	40.0	2,112.80	16.0	687.68	120				74,718	74,717.50		
General	31		Subcontract General Foreman support required due to delay, acceleration and related job problems from 3/25/04 through 9/22/04	217.0	14,499.94	8.0	511.28	2113.5	122,794.35	283.5	13,012.65								150,818.22		
	32		Shift Differential for work beyond 3/15/05, planned end date in original estimate.	1322.0	26,119.72	2306.5	58,804.73												84,924.45		
	33		Non-productive Direct Supervision Increase for Actual vs. Peak Manpower	6.0	253.28	50.0	1,734.30												87,893.10		
	34		Additional Overtime beyond Original Bid not in PCOs																15,121.00		
	35		Doubletime: February 15 & September 12, 2004																		
			Totals	1591.6	\$43,622.39	2538.0	\$71,188.76	3536.5	\$185,614.81	373.6	\$15,412.05	82297.6	\$50,018.41	3,695.20	5,932.40	15,792.88	1,254.34	26,644.82	536,653.23		

Overall Total @ Cost

Note: This calculation includes only the items that could be specifically documented in detail

Legend:

1. Rates (from 12/01/04)

General Foreman
 Gen. Foreman-2nd sh
 Foreman
 Foreman-2nd shift
 Journeyman
 Journeyman-2nd shift
 Apprentice
 Apprentices-2nd
 Laborer

Other Impacts and items will be added.

This list of events does not completely reflect the cost and schedule impact associated with events such as:

1. Cost escalation of materials, e.g. copper and steel, purchased later than planned due to information and schedule delays.
2. Schedule related cost increases related to labor scheduling
3. Cost and schedule impact related to the timing and completeness of RFIs and submittal responses
4. Cost and schedule impact related to the number, timing, definition and magnitude of change orders
5. Stacking of trades in spaces with limited area, access or space availability

2. Sequence of Work:	Dwg	Start Order
	C	1
	A	2
	B	3
	G	4
	F	5
	H	6
	E	7
	D	8

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B-0741

Expert Report Prepared for
Cohen, Seglias, Pallas, Greenhall & Furman, P.C.
On Behalf of
Creedon Controls, Inc.
July 2006
Regarding Damages to Creedon Controls, Inc
Related to Work on
Banc One Core Data Center II Project, Brandywine, DE

Introduction

Karden Construction Services, Inc. ("KCS") was engaged by Cohen, Seglias, Pallas, Greenhall & Furman, P.C. ("CSPG&F"), counsel for Plaintiff, Creedon Controls, Inc. ("CCI"), a Delaware corporation located at 3424 Old Capitol Trail, Wilmington, DE to prepare an expert report in the instant case of CCI versus Defendants, Banc One Building Corporation ("BOBC"), an Illinois Corporation, and Forest Electric Corporation ("FEC"), a New York Corporation in United States District Court for the District of Delaware C.A. No. 05CV300 ("Case").

In the preparation of this report KCS was (1) provided documents generated during the Project and exchanged during discovery through the date of this report, (2) given the opportunity to interview CCI personnel of our choice with knowledge of the Project, (3) asked to draw upon our personal experience and documentation related to our presence on the Project from March 2004 to its conclusion in October 2004, and (4) asked to apply our knowledge, education, training, experience and skill in the preparation of an independent expert report related to CCI's dispute with BOBC and FEC regarding CCI's scope in the construction of the Banc One Core Data Center II, 4001 Governor Printz Boulevard, Wilmington, DE 19802 ("Project").

Sufficient time was not available to review all documents in the detail we deemed appropriate. This was due to Defendants' delay in providing documents or releasing them for expert review prior to Court intervention. Be advised that we may need to supplement this report upon completion of our on-going detailed review of the documents. We reserve the right to supplement this report based upon our continued review of existing information, and any additional information that may become available prior to the resolution of this Case.

Report Summary

This report is divided in to the following sections:

- Introduction
- Report Summary
- Background
 - Project
 - Site Layout
 - CCI Scope of Work

Expert Report for Cohen, Seglias, Pallas, Greenhall and Furman Re: CCI v. BOBC & FEC

- Findings
 - Bid Process and Award
 - Schedule
 - Contracts
 - Project Management
 - Other Site Observations
- Project Results
 - Labor Loading Analysis
 - Damages
 - Critical Events-Labor Overruns and Direct Expenses
 - Total Cost Method
 - Other Damages – Bill of Particulars
- Other
 - Other CCI Projects at Site
 - FEC Contract with Banc One
- Closing

The results of this report are summarized below from the supporting details in the body of the report as follows:

CCI was engaged by Defendants to perform electrical work at Banc One Core Data Center II (“CDC II”) at Brandywine, DE. There was a second duplicate facility constructed simultaneously, CDC I at Bear, DE. CCI had no involvement with that Facility, but FEC was the Trade Manager at both.

The facilities were constructed to perform data processing for Bank One. CDC I and CDC II are duplicates of one another, and each facility individually has duplicate facilities to decrease the likelihood of downtime.

CCI was competitively awarded three separate projects at CDC II. All three were completed successfully by CCI including the largest project, General Power and Lighting (“GP&L”) and two smaller projects It Cable Conveyance Phase 1 & 2.

CCI interacted with BOBC, Tishman Construction Company of Maryland (“TCC”), Construction Manager, and FEC, Trade Manager. Both TCC and FEC had prime contracts with BOBC and were acting as BOBC’s agent.

Exhibit 1 shows the layout of CDC II. During the Project Area Designations and Drawing Designations were used to identify areas of the layout, introducing confusion during the Project in the areas that the designation is different.

CCI’s Scope of Work for the GP&L Project was basically lighting and general power (receptacles), for all areas except Drawing Area H, Administration, where scope

Expert Report for Cohen, Seglias, Pallas, Greenhall and Furman Re: CCI v. BOBC & FEC

included lighting and general power and feeders, power and lighting panels, automatic transfer switches, inverter systems, lighting control systems and empty conduits for voice and data systems.

A project of this size would always have a site meeting, even though there was no building on site to enable the bidders to review the request for proposal and plans in advance, and ask questions so that their estimates of their scope would be most responsive.

This guidance was not provided to CCI on the GP&L project and as a result, considerably more estimating was done by CCI than was required, because a proper pre-bid meeting was not held. With hindsight, this was an indication that the Project would be poorly managed.

CCI was awarded the GP&L Project for CDC II for \$3,184,600 with Project duration from October 2003 to April 2004. The plan was to work a 10 hour day and night shift.

GP&L started and followed the CCI manpower plan for about seven weeks. Late December 2003, all on-site storage was ordered from the site and all material, equipment, tools, and personnel areas were moved within the building footprint. As floor areas were poured material, equipment, tools and personnel areas were moved onto the concrete floors and eventually there was virtually no place for CCI to work efficiently. A large portion of CCI's work required lifts for work 25 foot above the floor.

During January and especially in February 2004, it became obvious that the Project was out of control, and labor overruns would be significant. There was considerable competition for the limited work areas and it was necessary to move material, equipment, tools and personnel items of other contractors to make any progress on the Project.

Project management was poor including coordination, communication, processing of Requests for Information ("RFI's"), Proposed Change Orders ("PCO's") and Applications for Payment. In addition, the LM corridor used to move material, tools equipment and personnel from one side of the building to the other was trenched for piping and was only available to a limited degree. There were numerous other problems recorded in the body of this report and in Exhibits 5 and 6, Critical Events.

The GP&L Project went from twenty-five to fifty weeks, and the manpower peaked from the planned high of twenty-four electricians on two shifts to forty-eight on two shifts. The labor overruns were major.

CCI was doing its work on a Letter of Intent only from October 2003. The completed subcontract with referenced documents never materialized for review by CCI. May 2004, a much larger contract, offering CCI a prime contract with Banc One, was

Expert Report for Cohen, Seglias, Pallas, Greenhall and Furman Re: CCI v. BOBC & FEC

received. This was the first complete contract that CCI could review, and in June 2004, offered Banc One changes to their contract for consideration.

By this time, CCI had already prepared the Critical Events used to communicate a myriad of issue resulting in \$1,300,000 of damages to CCI at cost. The objective was to utilize the Critical Events to communicate to Project Management the issues causing damages, so that they could be mitigated going forward, and to be used to process a change order for the damages to date. CCI received no meaningful response to the Critical Events, and the problems documented continued to create CCI damages through the end of CCI's work in October 2004.

Project Management by the Defendants in this case was unresponsive, and created more problems. RFI's to resolve issues with plans were largely not answered or not answered timely; decisions were being made in the field. Change orders were not issued for PCO's. Sometimes Applications for Payment were accepted with PCO's other times they were sent back. Change Orders were rarely issued. CCI was doing changes, constructively in order to continue to make progress on the Project. Job meetings were poorly organized and run. The job meeting documents did not highlight old items and did not pinpoint decisions and Contractor responsibility. Trade contractor input was not encouraged and was largely ignored when presented to the Trade Manager. Schedules were not regularly updated with Trade Contractor input and were not regularly issued. Coordination was poor and commitments made by the Trade Manager frequently did not materialize. CCI was planning supervision, personnel, tools, equipment and material only to be asked to work elsewhere without notice.

Failure of the Trade Manager to fulfill its responsibilities led to considerable labor overruns due to stacking of trades, areas unavailable for Work, lost materials, and a "ripple-effect throughout the Project, affecting all Contractors, work was performed out of sequence, work was moved from one area to another prior to completion.

In an attempt to somehow improve predictability of locations available for work without interruption, CCI prepared a short interval schedule to finish its GP&L work. The schedule was presented to FEC who promised to support the plan document and support never materialized.

In fact, Defendants' poor project management escalated to gross negligence and bad faith.

CCI's new unbundled materials were unbundled and thrown into dumpsters with no notice. Color coding of wireways to identify the contents and routing was painted over. As-built drawings documenting work done were thrown-away. Areas needed for Work were locked or made unavailable. The most productive shift for CCI, night shift was discontinued by Defendants.

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To make matters worse, change orders were still not issued, CCI was not permitted to bill many PCO's and Applications for Payment were going for months without payment. CCI was continuing to finance a portion of the Project for BOBC by borrowing and money from another bank for working capital and paying more interest.

CCI's damages are significant. The Critical Events documented to mitigate damages and settle damages in May 2004, were ignored and escalated. The initial Critical Events and those prepared to the end of the Project now total damages of \$2,209,119. Additional damages identified by the Total Cost Method, add another \$452,002 to CCI's damages. At the present time, these damages plus material losses, site office and home office extended project costs, etc. with adjustments now total \$3,400,406 through March 31, 2006, and continue to grow.

CCI's Work on the Project was completed in October 2004. All work was completed satisfactorily and no requests for rework were received through the one year warranty period since substantial completion, however through July 2006 Defendants refuse to pay CCI for the retainage earned from October 2003 through October 2004, and the outstanding balance on the original scope of Work totaling \$211,244 that has never been contested by Defendants.

We have reviewed the calculation of damages and find them to be properly calculated and accurate.

Our personal knowledge of the project, our conversations with CCI and FEC personnel during the Project, our interview of CCI personnel after the Project completion and our review of discovery documents to date indicate that the damages suffered by CCI were virtually all beyond CCI's control and responsibility, and the damages requested are proper and reasonable under the circumstances.

It is our opinion within a reasonable degree of construction certainty that CCI is due the damages proffered as fair compensation for the Work performed and damaged suffered under the conditions that existed during CCI's Work, and that additional damages that have accrued since Project completion.

Background**Project**

CDC II, Brandywine, was one of two facilities constructed by Banc One Building Corporation simultaneously. CDC II's structure and layout were an exact duplicate of CDC I, constructed approximately ten miles away in Bear, DE. These Core Data Centers

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were constructed to ensure that, statistically, it was virtually impossible that Bank One would be without processing capability and capacity under the most extreme conditions.

In addition to the redundancy between CDC I and CDC II, each of these facilities were, similarly, 100% redundant within each structure. That is, there were two data centers in each facility both capable of complete operation without the other. The utility electric service was redundant; there were uninterruptible power supplies (“UPS”) in the event of utility power failure on either or both of the utility independent services. The UPS was redundant. In the event that the two utility services failed and one UPS system in a facility failed, the other UPS could run one or both data centers to fulfill the processing requirements. Accordingly, each data center could be run by either electric utility service, or as needed, either UPS system.

CCI’s involvement in this CDC II Project included three smaller projects. Each was competitively bid, and each was awarded on the basis of a competitive estimate provided by CCI, and a scope review with FEC to ensure that CCI’s estimate was responsive in scope of work and price.

Although CCI bid projects at both CDC I and CDC II, CCI was successful in obtaining no projects at CDC I, and only three projects at CDC II including:

- General Power and Lighting (“GP&L”), Defendants’ Project # 6B, CCI Project # 2357
- IT Cable Conveyance Phase I (“ITCI”), Defendants’ Project # 21B, CCI Project # 2367
- IT Cable Conveyance Phase II (“ITCII”), Defendants’ Project # 22B, CCI Project # 2377

Although the details of all projects’ scope, price, schedule, billing and accounting results were reviewed, the subject of this report is primary related to GPL.

During the course of CDC II, CCI interacted with and performed work under the direction of:

- Banc One (Banc One Building Corporation), subsidiary of Bank One Corporation
- Tishman Construction Corporation (of Maryland), (“TCC”)
- Forest Electric Corporation (“FEC”)

The site of CCI’s Work was Brandywine Site Core Data Center (“CDC”) II located at 4001 Governor Printz Blvd., Wilmington, DE.

Site Layout

The building drawings and project schedule were divided into eight areas, labeled A thru H, CDC II Drawing Areas, Exhibit 1. Areas A & C were Data Centers; Area B housed the Uninterrupted Power Supply (UPS), related switchgear and batteries. Area D housed generator, incoming switchgear, mechanical and general

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switchgear rooms, loading dock and support rooms. Areas E & F each had separate chiller rooms, HVAC rooms, electric distribution rooms and support rooms. Area G housed more generators, incoming switchgear, mechanical and general switchgear rooms, and additional support rooms. The last area is H, which is used for Administrative Offices.

The mechanical areas (D, E, F & G) were separated from the Data Centers, UPS area, and Administration Building by a corridor located between columns L and M. This Corridor referred to as the L&M corridor, runs the entire width of the building and is the main access route for all materials, tools, lifts and manpower from the loading docks, to all areas of the building.

Confusion existed with the area designations because the Area designations and the Drawing designation were for some reason different:¹

<u>Area Designation</u>	<u>Drawing Designation</u>
C	A
B	B
A	C
D	D
D	E
D	F
D	G
Administration	H

CCI Scope of Work

GP&L was the largest of three projects performed by CCI for Defendants. CCI began work on GP&L October 2003. GP&L included lighting and general power receptacles in Drawing Areas A through G and all electrical requirements in Drawing Area H, the Administration Area. GP&L included feeders, power and lighting panels, automatic transfer switches, inverter systems, lighting control systems and empty conduits for voice and data systems.

Findings

Bid Process and Award

¹ Bank One Projects, History and Current Status to June 30, 2004, Section I, p. 2

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The request for proposal was rather unique for the GP&L project. No pre-bid meeting was scheduled for this major project. It is extremely rare not to have a pre-bid meeting; it is even rarer for a project of this magnitude with the level of sophistication of the Owner and lead contractors, especially when the scope of Work is not sufficiently defined. There were over 200 drawings and many were issued for information only. Vague statements like, "contractor to furnish control systems", made it impossible to determine what the scope of work actually was without further clarification, as there were many control systems shown on the furnished drawings.

CCI's bid on the first project, GP&L, was competitive and CCI was asked to come in and review it for scope. At that time it was learned that some bid items desired by the Owner were not included in CCI's proposal and several items were included in the CCI proposal that were not required. This resulted from FEC's failure to: properly conduct a bid process and respond to CCI's numerous pages of questions submitted during the bidding process and attached to CCI's bid. CCI wasted a week bidding work not part of their scope. This was CCI's first introduction to a poorly managed project by Forest. At this time, however, CCI assumed on a project of this size with an Owner of Bank One's stature, it was inconceivable that this was anything more than an anomaly or just one poor FEC pre-award event.

After the bid review meeting on this first project CCI had several days to revise its price based on a "Scope of Work" issued by FEC. CCI's bid revision was negotiated with Paul Angerame, Vice President of Forest (on-site in-charge person during the projects) and this project was awarded to CCI by FEC at \$3,184,600. The basis of CCI's price was its bid scope, schedule, prepared at bid time, and normal industry conduct of the project. The project commenced immediately with a March 2004 completion date. The project was planned working 10 hours per day, 6 days per week.²

Schedule

CCI's final estimate after the scope review and award of the GP&L by Defendants was based upon a schedule and supporting cash flow analysis prepared at bid time, October 14, 2003, to finalize the Project staffing, which is a major part of the financial requirements. These financial requirements were the basis to request working capital from CCI's bank prior

² Ibid. p.2-3.

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to the GP&L Project start. The same procedure was used by CCI to obtain working capital for the other two projects completed by CCI during the Project.

GP&L Project schedule is documented in the Weekly Actual vs. Projected Hours Comparison Chart, Exhibit 2 and the related Weekly Actual Projected Hours Table, Exhibit 3, which is described in detail in the Labor Loading Analysis section of this report. The GP&L was scheduled to begin during week-ending October 19, 2003 and end week-ending April 4, 2004 at the direction of the Defendants. Additionally, CCI was requested to work a day shift and a night shift, ten hours each. This resulted in a CCI plan to peak for three weeks, end of January and beginning of February 2004 with fourteen electricians on the day shift and ten electricians on the night shift.

The original twenty-five week timeframe doubled to approximately fifty weeks, and the total electricians divided between day and night shift, also double from twenty-four to forty-eight electricians. This is well beyond what should have occurred or beyond anything that an experienced contractor could have reasonably expected, based upon the information available at bid and award time for GP&L.

The doubling of overall GP&L Project duration and peak staffing was due to factors including: design changes and upgrades; delays in getting information or clarification of exactly what the owner wanted to do in many areas; insufficient lead time for design changes and installation planning; work areas not made available as needed/planned; redesign, other trades performing work in limited areas assigned to CCI, stacking of trades; on-site storage of materials and equipment of all trades limiting useful working areas; no assigned storage areas for material and tools for proper organization and security; rework; re-sequencing of work; mobilization and demobilization in established work areas; reassignment of personnel; repeat layout; tool and material re-planning and arrangements; lack of project management and coordination of the trades.

Contracts

As a result of the Bid Process and Award, FEC sent a letter of intent to CCI dated October, 2, 2003, documenting their intention to enter into a Contract with CCI to perform electrical services at the Bank One Brandywine - CDC II, General Lighting and Power – RFP 6B. An eight page sample subcontract was sent that was silent with respect to the key terms and conditions, i.e., blank and therefore defective and inadequate as the basis of a Contract or a document that could be reviewed. In addition, the second paragraph indicates the incompleteness of the sample/blank subcontract indicating, “Although the Prime Contract Documents have not been finalized, it is the intent of the parties to begin Work and will endeavor to enter into a execute a definite Subcontract Agreement defining the construction services which shall include, in addition to other terms and condition,

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customary representations, warranties, bonding, indemnities, and insurance from Subcontract Agreement executed.”³

Three key elements are noteworthy: (1) CCI requested and were not given a copy of the Prime Contract that Mr. Angerame’s letter indicates was not finalized along with other significant terms and conditions, and (2), FEC did not have a contract with BOBC, and was working without a contract until February 2004, and (3) subsequently all Contractors under FEC’s direction signed a Prime Contract with BOBC, no contractor signed the sample subcontract, such as that sent to CCI.

At no time did CCI have a contract from FEC that it could review to start the fourteen-day response period, which is understood. The Prime Contract terms and conditions, a sixty-page document alone, was a significant part of the eight-page subcontract, and the subcontract could not be reasonably accepted by CCI without reviewing the Prime Contract, let alone other unspecified terms and conditions. Additionally, FEC never intended to enter into a subcontract agreement with CCI as demonstrated by the fact that they and all the other electrical contractors under FEC’s management, as BOBC’s Agent and Trade Manager, executed the Prime Contract with BOBC.

CCI began the GP&L Work still waiting for a completed subcontract with all terms and conditions included as well as a copy of the subcontract. The subcontract was never discussed by the Defendant, no subcontract was ever sent to CCI. CCI did not receive a complete contract until May 10, 2004. What we received was not a subcontract but a sixty page prime contract between Bank One and CCI. The proviso of 14 days for review was not feasible at this point in the Project given the Critical Events experienced and given the size and complexity of the presented contract. CCI was able to finish their review and present to FEC on June 14, 2004, the proposed Addendum One to the contract. At no time during the project did Defendants discuss or negotiate the CCI Addendum following the meeting at which it was proposed.

Project Management

- Plans were defective, inadequate, incomplete, erroneous and uncoordinated. Defendants failed to timely and adequately get design professionals to respond to RFI’s. Failure of Defendants and their design professionals to respond to requests for information (RFI’s) led to: (1) requests for Information (RFI’s) not promptly processed and/or not promptly answered. Many RFI’s were answered months later, if at all. This prevented CCI from performing work as anticipated at bid time and manpower had to be reassigned where possible, (2) RFI’s resulted in the production of many change order requests at CCI’s time and expense that frequently did not result in extra work, and therefore resulted in considerable uncompensated cost by CCI on behalf of the Owner at the request of Defendants, (3) Failure to timely

³ Paul Angerame, FEC October 2, 2003 letter to CCI, p. 1

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respond to RFI's and proposed change orders ("PCO's") together with the contractual risk of no payment for work performed without a written change order resulted in frequent labor overruns, re-sequencing of work and reassignment of personnel where possible, and (4) many change order requests ("Cores") were not finally addressed causing delays and the performance of work out of sequence at an advanced point in the project when the required work was much more expensive to perform.

- Project coordination and administration was deficient. The inadequate plans and the coordination complexity of the Project increased the difficulty of managing the projects and Defendants did not have and were unable to dedicate the level of expertise required for the time necessary to properly manage, coordinate and schedule the projects with proper participation of the subcontractors in the process.
- Defendants' failure to manage, coordinate and schedule the work of the various trades caused "ripple effects" on all trades resulting in labor overruns, obstructions, resequencing of work, stacking of trades, time extensions, acceleration, etc., all of which disrupt the work of the trades and increase their costs (direct, indirect and overhead) beyond anything that could be anticipated at bid time or contract execution. Those knowledgeable in construction can visualize many of the "ripple effects" and consequential damages resulting from what can appear to the unfamiliar as relatively insignificant changes in scope of work or schedule. The ripple damages on these projects in many cases were not obvious for a long time after the occurrence of the original causes including change orders and constructive change orders involving the work of other trades as well as CCI's work. These ripple damages can be recognized in the total cost, and in many cases identified in the Critical Event details submitted during the Project to mitigate additional damages to CCI, and at the conclusion of the Project to enhance amicable settlement of damages.
- Failure of Defendants to fulfill its trade coordination responsibilities Resulted in stacking of trades (scheduling multiple trades in the same small work areas at the same time), re-sequencing of work, labor overruns and rescheduling.
- CCI was taken out of the normal lighting, major material and equipment procurement activity. FEC made purchases from suppliers in New York, and they ignored the requests and requirements of CCI. FEC, who had relationship with their suppliers in New York, did virtually nothing to facilitate, addressing, identification labeling and packaging of the orders installed by CCI. Deliveries were frequently mislabeled and misdirected to other electrical contractors on the Brandywine and even Bear sites, and considerable time was lost tracking down orders for installation.
- Coordination of the Electrical Trades by Defendants was lacking and coordination of the Electrical Trades with the other trades on the Project was virtually non-existent. Regular coordination meetings were held, but followed a format that did not promote interaction of the trades, input from the trades, commitment of the trades and responsibility for commitments made. The daily "coordination" meetings were nothing more than orders issued by the Defendants and commitments made by the Defendants without proper meeting documentation, only to find that virtually

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nothing promised materialized. These “coordination” meetings were labeled by the trades, “daily lie meetings”. Inputs from the trades were virtually ignored.

- Proper Meeting Minutes and coordination documentation were not maintained by Defendants in trade contractor meetings. Job minutes did not document the issues covered item-by-item, issues discussed were not assigned numbers relative to the meeting number in which they were raised, and the sequence in which they were raised at that meeting, agreement and commitment was not documented and parties responsible were not documented. This made it impossible to determine what commitments were not met, how long the commitments were not met, who failed to meet a commitment holding them responsible for back-charges, etc. to compensate those trade contractors for failure of other trade contractors to meet their commitments, and to discourage failure to coordinate.
- Coordination meetings did not include three week look ahead for future planning and coordination of the trades present at a meeting, and one week look ahead where each trade had the opportunity to express concerns and avoid conflicts in advance prior to their costly consequences in the field.
- Fundamental good project management practices were not present at the trade contractor level. Owner level meetings had some semblance of proper documentation, but these were at a high level, repetitive, perfunctory and did not contain the detail necessary to make them truly effective. FEC although present at these Owner level meetings did not take a lead from the minutes maintained at this meetings as a guide for what should have been done at the trade contractor level.
- Because the Defendants were doing such a poor job at coordination and scheduling the work, and in the interest of mitigating damages due to inefficiencies and labor overruns, CCI obtained an agreement with Defendants that CCI would prepare a plan for scheduling CCI’s GP&L Work from May 13, 2004 to completion June 25, 2004. A detailed three-page short interval schedule, Schedule to Complete, Exhibit 4, was prepared indicating what CCI Work was scheduled in what area by day including the crew size. Defendants reviewed the schedule and agreed to support it. Understanding that issues arise requiring change, CCI requested Defendants strive to provide forty-eight hours notice of any impediments to CCI’s scheduled Work. Defendants agreed, but almost immediately, Defendants failed to work with CCI and honor their commitment. The whole timely short interval scheduling activity by CCI was wasted.
- Defendants failed to recognize due to their poor project management, gross negligence and bad faith that:
 - due to the large size of the building, forcing CCI to make frequent deployment of labor, material and equipment from one end to the other was highly unproductive
 - the incomplete manner in which the building was being constructed was making it impossible for CCI to complete its work in a given area without multiple returns

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- without properly conducted and documented coordination meetings, others could not be held responsible for their failures to the detriment of CCI's productivity
- schedules were not prepared and updated regularly utilizing the input of the trade contractors, leading to CCI frequently being in conflict with other trades working in the same area
- the building interior was loaded with material and equipment from on-site outside storage, (1) making it extremely difficult for CCI to find ways to do their Work over twenty-five feet above the congested floor areas without constantly moving tools and equipment of others, and renting more expensive equipment for overhead access, and (2) securing and organizing material, tools and equipment from loss.
- With virtually no written notice or direction, and failure to provide sufficient time to react, CCI cannot perform its Work in a normal manner consistent with industry standard and anticipated at time of bid and award.

Other Site Observations

The Critical Events for GP&L, Project Start to 4/7/04 and 4/8/04 to Project End, Exhibits 5 & 6, respectively, document over 79% of the labor overrun hours. Each item of the CE reflects Site Observations that will not be repeated here. The items below highlight some specific items with high negative impact on the Project:

- From the beginning, the amount of time required for submittal and engineering review, or to get answers to Request for Information (RFI's) was long, or in the case of some RFI's were never answered in writing. The onus was on the contractor to submit documentation that required a "yes" or "no" answer and initials, otherwise a long delay should be expected.
- The concrete decks were not poured in alphabetical order. TCC proceeded with A, C, G, B, F, E, D and then H. None of CCI's work could start in an area until the deck was poured. At bid time CCI reasonably expected that the concrete pours would be contiguous versus randomly poured throughout the building. This caused CCI to move labor, material and equipment over long distances under extremely difficult and crowded conditions.
- In mid-December 2003 about the time that deck G was being poured, the Construction Manager required all trades to move all their material, tools, and break areas from trailers and storage vans outside the building onto the freshly poured concrete slabs so that TCC could start the footers for the Administration Building and rough grading for the parking lot. Although not realized at the time, this was the beginning of CCI's biggest labor problems. There were hundreds of men working on the site at this time. Now all of the gang boxes, lunch tables, material and

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equipment that were outside were added to the bulk material (i.e. ductwork, piping, equipment, switchgear and high reach lifts) already on the slab. The result was like building a “dam in the river”. It stopped or reduced the flow of tools, material, equipment and lifts from one area of the building to another. When CCI finally got tools, equipment and material to an area, the floor was covered with stored items, which blocked the work. This was further exacerbated as more and more large equipment arrived and walls started to be built. CCI spent more time each day moving CCI’s equipment and the equipment of others than CCI did installing CCI’s work. When this started, CCI was working in Data Centers A and B and it appeared it would be a temporary problem, but as the job progressed it only got worse instead of better.

- Another major obstacle emerged in mid-January. The major L&M corridor has two five feet wide by three feet deep trenches where chilled water supply and return piping goes from the chiller rooms to the data centers. The trenches run down the middle of the corridor for about forty to fifty feet at two separate locations. At the Bear site, an exact duplicate site also under construction, the trenches were covered with 1” thick steel plating which allowed work to continue. At CCI’s site, these trenches were left open for approximately five to six weeks creating another “dam in the river” that slowed the job progress.
- Another major obstacle to CCI’s Work was that the major UPS switchgear, that filled eight rooms in Area B, was too large to fit through the doors in the rooms where it was to be located. Because of this, each room only had three walls built so that the equipment could eventually be set. CCI was not able to finish any lighting, branch power, or data conduit runs. After fighting CCI’s way to an area, CCI would install half the work and then pack up and fight its way to another area only to return at a later date to do more work and/or finish.
- It is important to note that this affected lighting, branch power, and data work, and that the majority of CCI’s work was suspended from or installed onto the roof support steel 25 to 27 feet above the slab. This was not work that would be readily accessible under the best of conditions. CCI was trying to install work 25’ in the air with the floor covered with other’s material, tools and equipment. CCI could only install half of its work before having to move, and the major route to move was down a corridor with two, five-foot wide trenches blocking the way.
- By the end of January through February, the block walls for the generator rooms on both ends of the building started to go up. The construction manager instructed the masons to un-load and store trucks loaded with block at the east end of the L&M

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corridor and on the loading dock on the West end of the building. This caused two additional bottlenecks and further reduced CCI's movement within the building.

- In March the dam burst. By this time, CCI had half-finished work in every area of the building. The manpower for all crafts was peaking; lifts were everywhere. Rooms were filled with equipment that now blocked CCI's access to the ceiling. CCI could not get in before, and now that it could, the very items that kept CCI from finishing in the first place blocked CCI's access.
- At this point, the construction manager decided to go on a cleaning spree. TCC had allowed rooms and corridors to be blocked for three months and all of a sudden, it was not acceptable. TCC had laborers go through the site and throw away anything that looked like trash. Unfortunately, where laborers are concerned, any thing that keeps them working looked like trash. This included CCI's lighting fixtures, conduit, wire, support steel, and most of its working as-built drawings. CCI had conduit runs to finish everywhere and the drawings showing where it stopped were thrown in the dumpster.
- In mid-March, CCI notified FEC in a phone conversation that there was a serious problem and that CCI would be following up with written documentation as soon as it could be quantified and qualified. In early April, CCI notified FEC in writing of the impact of these items and tried to estimate the scope of that impact. CCI was trying to put this information together while putting out fires throughout the job site.
- During the project in each room the Construction Manager, TCC, would request lights and receptacle power. CCI would have to wait until all equipment by others was installed to do the lights and receptacle power and typically before CCI could finish TCC would require all contractors to vacate the room without any scheduling time for CCI to finish their work, and TCC would schedule the painter to paint the floor. Had TCC scheduled a couple of days for the lighting, the painter could have followed and the rooms would be complete. By painting the floors first, TCC forced CCI to cover the floors with plywood to protect them and greatly increased the amount of time required for CCI to finish. This not only increased CCI's labor hour requirement, but insured CCI would fall further behind as each room now took longer to complete.
- April of 2004 TCC and FEC directed CCI to eliminate the night shift that was the most effective time for CCI to do its work, because of the limited activity on the site at nights. This dramatically decreased CCI's productivity and progress on the project.

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- The construction manager in the Administration Building repeated the same strategy that hurt CCI's in the larger building (i.e. rooms were filled with tools, material, equipment and blocked to CCI's installation). This was done even though CCI recognized the problem and tried to schedule CCI's work in a productive manner. The lighting and branch power was still low priority and little or no coordination was offered. TCC and FEC's management strategy effectively ignored CCI's Work until a need such as lightings materialized, and then asked CCI to accelerate as if CCI were behind schedule, which was not the case.⁴

Project Results

Labor Loading Analysis

General Power and Lighting, CCI Project #2357, Weekly Actual versus Projected Hours Comparison Chart, Exhibit 2, and the related table, Exhibit 3, illustrates the huge difference between the staffing of the Project anticipated at bid and award time and what actually occurred through no fault of CCI. What is obvious in each case is the magnitude of the darker shaded areas (actual) versus the smaller lighter vertical bars that represent what was anticipated by CCI at the time of the original bid and award based upon the bid documents and representations of Defendants.

The actual or dark shaded areas dwarf the smaller bars in the lower left corner of the charts. It is easy to visualize that these projects became much larger than could have been conceived originally.

The cost of labor on the Work alone increased considerably because of the increase in labor rates at the anniversary of the labor contract. CCI had to pay these increased labor costs and associated fringes and taxes from December 2003 because the project did not complete as originally scheduled and the basis of CCI's estimate.

The charts for each projects show that the labor overruns and additional unplanned work shifted the projects many weeks as indicated by the difference in time between the actual and projected peak manpower loading. Increased total cost cannot be recognized on a day-to-day basis or as individual change orders and change order requests are issued. No one could reasonably expect CCI to envision at bid time and contract execution that the GP&L project would have increased so dramatically in labor hours worked (straight time and overtime) and project duration.

⁴ Ibid., p. 3-6

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Another effect that can be visualized by the charts is the dramatically irregular shape of the top of the shaded or “actual hours worked on a weekly basis” curve as compared to the reasonably anticipated smooth/regular top of the “projected hours worked on a weekly basis” curve. The actual hours curve illustrates a very erratic project progress. The actual peaks and valleys represent dramatic unanticipated changes in staffing levels during the project. These changes represent repeated cycles of labor overruns and cost of recruiting, selecting, hiring and training new workers not accustomed to the project, and then laying workers off so that the cycle can be repeated again and again during the project. These costs could only be captured in a total cost analysis of the project; they could not be anticipated or captured on an event-by-event basis when change orders and change order requests are completed without the overall perspective of the final project.

The huge difference in projected and actual labor hour peaks, which is obvious in the project chart, could not have been anticipated by CCI at the start of the project or even during the project for that matter. With these huge peaks comes the need for considerably more supervision in the form of sub-foreman or “pushers” who increase labor cost by rate increases as well as less productive work themselves due to their added role as supervisors. Adding sub-foreman increases the average cost of a labor hour. Additionally the peak is not anticipated so crew sizes grow larger and are less efficient due to the lower level of supervision. Finally, it is recognized that the crew is too big and another sub-foreman is added. The opposite happens on the down side of the peaks. The crew is eventually too small to need an additional sub-foreman and it is merged with another small crew, but the extra sub-foreman wage remains. The sub-foreman is needed to plan the use of labor hour-by hour, day-by-day and ensure that the crews are supplied with material and equipment to support the work assigned. Only a total cost approach with the overall job perspective of a completed project, as illustrated by the attached charts, provides the ability to see the overall cost impact of the way this project was conducted by the Defendants. The chart comparison between projected and actual illustrates that these projects were in no way conducted in a manner that would be anticipated by anyone with experience in the construction industry.

Further inspection of the project charts show a considerable amount of overtime that could not be anticipated at the start of the projects, especially towards the end of the project where a considerable number of labor hours are worked at time and one-half as well as double time.

Continued overall and detailed analysis of the labor hour charts and tables at the conclusion of these projects indicates how only the total cost approach can capture all the unanticipated costs of these projects such as: the amount of work performed after wage increases, the unanticipated overtime and shift premiums, lost worker productivity due to lost momentum, inadequate tools and equipment for the unexpected large work force, insufficient tools and equipment in reserve to avoid the inefficiency of lost labor when equipment breaks down, lost labor and labor efficiency due to material and equipment logistics that could not be reasonably anticipated and planned, impact on worker morale and productivity due to excessive congestion in the work areas, waiting for preceding work to complete or working around work that is the subject of delayed change orders, constructive change orders or change order

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requests, loss of labor and labor efficiency in lost momentum due to schedule and work related excessive crew shifting from work area to work area, excessive training and retraining of crews, under-utilization of crews, and loss productivity due to the impact on worker attitudes of what they wrongly perceive to be confused and disorderly management and scheduling by CCI, who can only react to the environment created by the Defendants.

On projects that unexpectedly grow due to labor overruns and inefficiency related to poor plans and specifications, poor general management, poor response to RFI's and Cores, poor coordination, poor scheduling as is obvious in our review of the documentation, labor charts and tables in this project, there was: (1) the need to hire and retain less qualified individuals due to the manpower turnover associated with a project with numerous peaks and valleys, (2) the need to use less qualified working foremen because of larger crews and fewer experienced foreman available, and (3) excessive time studying drawings, making changes and rescheduling work.

As the labor hour charts and tables indicate, these projects extend well beyond the originally anticipated duration: CDC II originally anticipated at about twenty-five weeks extended another twenty-five weeks. Duration changes such as these have a dramatic impact on overhead. The original bid applied overhead is not adequate in situations such as this Project. There was no way for CCI to anticipate the substantially greater overhead allocation that was necessary for these projects as is currently illustrated by the attached charts and tables. Accordingly, overhead was not absorbed by the periodic change orders, change order requests and time and material invoices. The appropriate overhead allocation could not be presented or justified until the project was completed and duration overruns, total labor hour increases and peak work force requirements could be illustrated and analyzed in the chart and table such as the attached. It is extremely difficult for a construction manager, trade manager or owner to understand the true overhead rate needed by a subcontractor on this Project. CCI has a much greater payroll and accordingly a much greater support requirement in overhead. Additionally a contactor, like CCI, must compute overhead as a percentage of his own costs alone, not the overall cost of the project, as is the case with the Defendants. The Defendants have a limited support personnel payroll as compared to needs of trade contractors such as CCI. The Defendant's overhead is a percentage of the cost of all trade contractors under their management, not just their own organization; it is spread over a larger number of dollars.

Damages

Critical Events-Labor Overruns and Direct Expenses

The Critical Events ("CE") documents detailed each individual event that occurred during the project, that could be identified, that resulted in damages to CCI due to the Defendants. The CE in addition to the detail description of the event leading to the damages, further categorized the event by drawing, sequence and assigned an Item No. The CE detailed by each event the labor damages by day and night shift including the damages suffered by the General Foreman, foremen, journeymen, apprentices and other

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damages. It included hours lost by each classification extended by their rates and other related, direct non-labor dollar damages. Each Item number is a proposed change order at cost.

The first CE was originally prepared by CCI to identify the areas creating difficulty for CCI to perform its work, so that these events could be communicated to the Defendants for the purpose of mitigating further damages during the course of the Project, and to serve as a vehicle to arrive at an amicable settlement for CCI damages experienced to the date of original submission.

There were two CE documents provided to Defendants. The first included all events that could be identified from the start of the Project to the first week of April 2004. It took about a month to prepare the initial CE and present it to the Defendants for their review and comment. It was presented in a May 2004 meeting with Paul Angerame, Vice President for FEC and Project Manager for the Electrical Trade Manager, Agent for Banc One Realty Corporation ("BOBC"). The meeting with Paul Angerame was suppose to result in a follow-up meeting with Tishman Construction Company of Maryland, Construction Manager, but this meeting never materialized, and their was no further action by Defendants on this important and carefully prepared document.

The second CE document was identical to the first CE document in form, but it included all events resulting in damages that could be identified from the second week of April to the conclusion of the Project. The CE represents events that occurred that could have been avoided, if action was taken by Defendants in response to the first CE.

The first CE represents damages at cost of \$1,292,870 (Totals plus Saturday Premium), CE Event Change Orders, Exhibit 5. There were minor adjustments to this first CE from its first submission to its final submission following the conclusion of the project. In accordance with Defendants guidelines for change orders, CCI deducted the Owner-Controlled Insurance Program (OCIP), added material, direct job expense of 7% and overhead and profit mark-up on their own work of 20%, and 6% for subcontractor mark-up. All except the mark-up for overhead and profit was prescribed by the Defendants, CCI during the Project submitted to Defendants documentation supporting its addition of twenty percent to the CE costs to cover overhead and profit. The mark-up selected was supported by references from the original estimate prepared by CCI, publications from the National Electrical Contractors Association and a publication used by Bankers in loan evaluation, Robert Morris Associates. This resulted in a Proposed Change Order Amount ("PCO") on PCO #51 of \$1,588,402, Exhibit 7, (no subcontractor costs were included on this PCO), formally submitted dated March 31, 2005, originally submitted May 2004.

The second CE represents damages at a cost of \$526,663, Exhibit 6. In accordance with Defendants guidelines for change orders, CCI deducted the Owner-Controlled Insurance Program (OCIP), added material, direct job expense of 7% and overhead and